

Jamie Lay

Alpharetta, Georgia 30004

Phone: 706-633-7840 E-Mail: jamie@jamielay.com

Objective

While working directly with clients in all phases of the hardware/software development life cycle, I necessarily developed a wide variety of professional skills. While no one person can know everything, it is the ability to adapt and learn, to apply new tools and techniques to resolve specific problems and to continue to grow professionally and interpersonally that defines sustainability in this or any field. As a self-motivated individual whose consulting career has spanned more than two decades, I am looking forward to applying the skills I have learned to increase the profitability of my employer while working with other talented specialists as I continue my formal and self-directed education.

Experience

Macintosh Programming Consultant

1986 – Present

Developed commercial and in-house software titles, drivers and libraries using a variety of technologies.

Windows Programming Consultant

1998 – Present

Produced commercial applications and driver-level products using appropriate tools and methods.

Linux, Hardware, Firmware Consultant

2002 – Present

Designed and built microprocessor-based devices and firmware for consumer and retail applications.

Education & Certifications

BS in Computer Science

2015

University of North Georgia, 3.6 GPA

Electronic Engineering Technology

2012

Lanier Technical College, 3.7 GPA

Certified Ethical Hacker (CEH v6)

2010

Certified Penetration Tester (CPT)

2010

Internationally certified through EC-Council and IACRB in methods of evaluating and attacking computer systems to identify and exploit weaknesses useable to gain root-level access to the target system.

USAF

1979

Airborne Mandarin Chinese Interpreter. Top Secret SCI Clearance (Inactive).

Skills

Languages: C, C++, Bash Shell, PHP, LAMP, JSON, REST, Ladder Logic, Java, JavaScript
Databases: Oracle, DB2, SQLite, MySQL, dBase
Embedded: Firmware, Bare Metal, PIC/Microchip, Arduino/Atmel, ARM, PLC, HMI, Raspberry Pi, BeagleBone
Platforms: Desktop, Mobile, Handhelds, PLCs. Kiosks, System libraries/DLLs, Drivers, Utilities, Hardware
Protocols: TCP/IP, RS232 Serial, I2C, UART, GPS, Wireless, A/D, D/A
Tools: Buildroot, Make, Git, Jira, Bit Bucket, Confluence
OS: Linux, Macintosh, Windows, Hardware

US Patents and Patent Applications

"Secure Digital Document Distribution with Real-Time Sender Control of Recipient Document Content Access Rights"

Patent Application No: 13/445,846 (2012)

"Method and Device for the Prevention of Piracy, Copying and Unauthorized Execution of Computer-readable Media"

Patent Applied For: US 2008/0289046

"Method for removing labels adhered to a diskette and de-labeling means for doing so."

U.S. Patent 5,378,300 (1995)

G. S. Huvard and A. D. Lobo, et. al.

Work History

12/17 -

Scientific Games

Senior Software Engineer. **(Linux, C++, PHP, MySQL)**

Support and enhance an international lottery backend system. Process EFT and Credit Card transactions using a variety of national and international processors. Augment administrative systems for lottery players including full suite of actions exposed via REST API.

12/24 - 3/25

Itron

Hardware and Software Consultant. **(Linux, Bash, 32-bit Arm®)**

Achieved 43% improvement in building and writing secure file systems on the NAND memory of electric power meters during the manufacturing process.

1/23 - 2/24

Ingenico

Senior Software Firmware Engineer. **(Linux, C++)**

Improved Linux OS applications for commercial retail credit card payment processing devices.

7/21 - 10/22

ADT

Senior Software Firmware Engineer. **(Linux, C++, 32-bit Arm® Cortex®-A5)**

Developed Linux OS application for Microchip SAMA5D chipset. Customized OS using Buildroot. Used BASH shell scripting to auto-update firmware over Wi-Fi.

- 9/12 - 12/17 **54 Bells, Inc.**
Principal Engineer. (**Mac, Win, Linux, Apache, PHP, MYSQL, Firmware, PIC, Arduino, RS232, I2C**)
Created custom CMS and GPS tracking and other software and hardware devices as required.
- 7/06 – 12/17 **Advent Ignitions**
Hardware and Software Consultant: (**C/C++, MPLAB, Embedded Firmware, PIC, Arduino, RS232**)
Created desktop UI app, firmware and in-circuit serial programmer for customer-programmable racing ignition for sport watercraft and snowmobiles.
- 7/15 – 4/17 **Equifax**
Lead programmer: (**Java, Smart GWT, Oracle, Eclipse**)
Facilitated development of mission critical user portal for commercial services.
- 12/10 – 4/11 **AT&T**
Software Engineer: (**Linux, C/C++, DSD**)
Improved tools used for the validation of software written for the iPad and iPhone accounts.

Companies using my commercial software

3M Company	Medical Education Systems
American College Testing Program	Milton Hershey Medical Center
Anritsu - Corp. Laboratory, Japan	MIT Lincoln Laboratory
Apple Computer	NASA Ames Research
Arco Oil & Gas Company	National Cancer Institute
Argonne National Laboratory	National Institutes of Health
AT&T Bell Laboratories	National Renewable Energy Lab
Ben-Gurion University, Israel	Navy Research Lab
Berkeley Systems	North Carolina State University
BFGoodrich R &D	Northeastern University
Bonneville Power Administration	Northern Telecom
Boston University	NTT Opto-Electronics, Japan
Bristol-Myers Squibb	Ohio State University
California Institute of Technology	Purdue University
Cardiac Arrhythmia Consultants	Sandia National Laboratory
Chevron U.S.	Santos, Ltd., Australia
Communications Research Center, Canada	Scripps Institute of Oceanography
Corporate & Education Software	Scripps Research Institute
Cray Research, Inc.	Texaco
Dugan/Farley Communications	The Institute of Physics, England
Duke University	Union Carbide Chemicals &Plastics
EG&G Idaho	University of Calgary, Canada
E.I. du Pont de Nemours & Co.	Univ. California, Berkeley
Eli Lilly Research	Univ. California, Los Angeles
FUNDP Computing Centre, Belgium	University of Iowa
Goddard Space Flight Center	University of Maryland
Hughes Aircraft	University of Notre Dame
Illinois State Geological Survey	U.S. Air Force Materials Laboratory
Indiana University	U.S. Army
John Hopkins University	U.S. Food & Drug Administration
Lawrence Berkeley Laboratory	U.S. Department of Energy
Marine Biological Laboratory	Waibel Technical Computing
Massachusetts Inst. of Technology	Westinghouse Corporation
McMaster University	Woods Hole Oceanographic Institute